METHOD FOR GENERATING LIBRARIES OF ANTIBODY GENES
COMPRISING AMPLIFICATION OF DIVERSE ANTIBODY DNAs
AND METHODS FOR USING THESE LIBRARIES FOR
THE PRODUCTION OF DIVERSE ANTIGEN COMBINING MOLECULES
Wigler, et al.
Appl. No.: Unassigned   Atty Docket: STRATAG.7C2DV2CI

Construct libraries of genes encoding
Ig heavy chain and/or light chain
in E. coli vector

↓

Increase diversity of libraries via
random mutagenesis (optional)

↓

Transfect libraries into cultured
cells, where they are expressed

↓

Identify cultured cells
expressing Ab of desired specificity

↓

Isolate gene(s) encoding Ab of
desired specificity and express

Fig. 1

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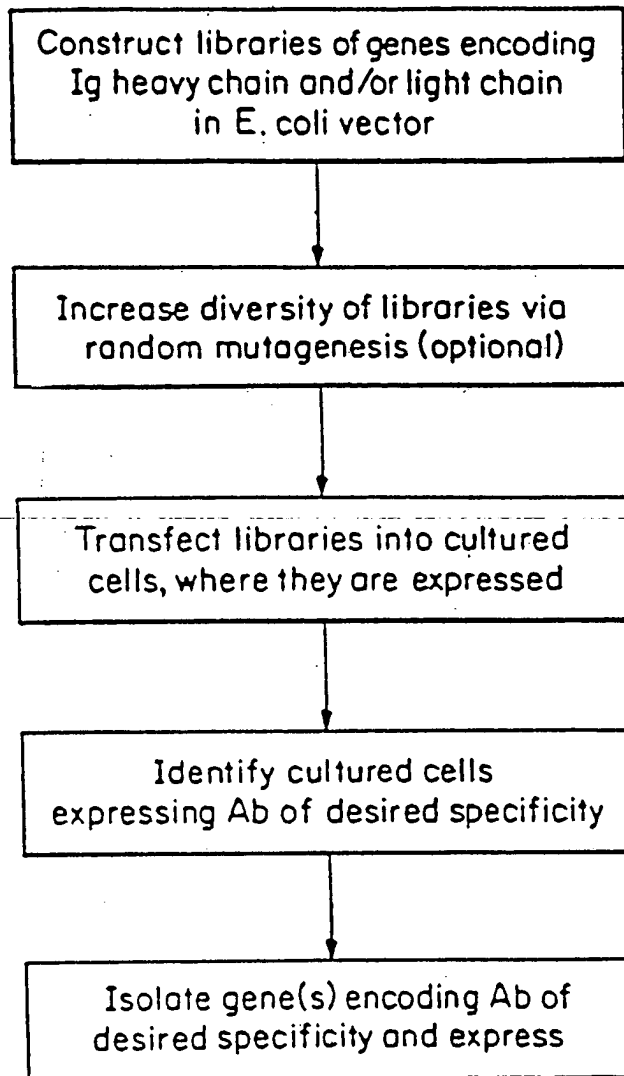*Appl. No.: Unassigned*   *Atty Docket: STRATAG.7C2DV2C1*

Fig. 2A

Fig. 2B

Fig. 2C

Fig. 2D

Fig. 2E

Fig. 2F

Fig. 2G

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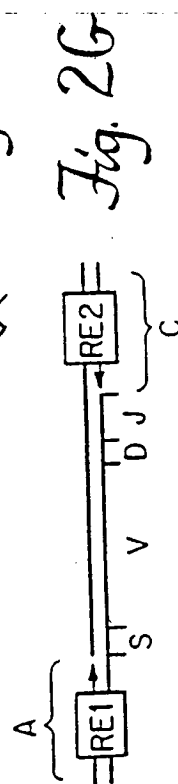*Appl. No.: Unassigned*   *Atty Docket: STRATAG.7C2DV2C1*

Fig. 3

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COMPRISING AMPLIFICATION OF DIVERSE ANTIBODY DNAs
AND METHODS FOR USING THESE LIBRARIES FOR
THE PRODUCTION OF DIVERSE ANTIGEN COMBINING MOLECULE
Wigler, et al.
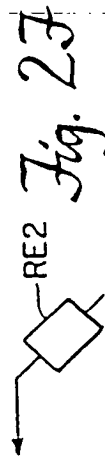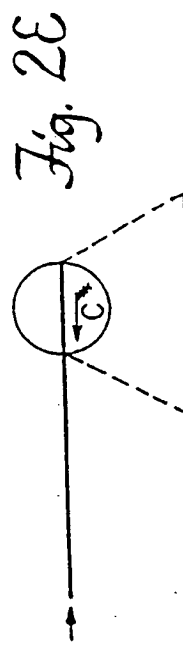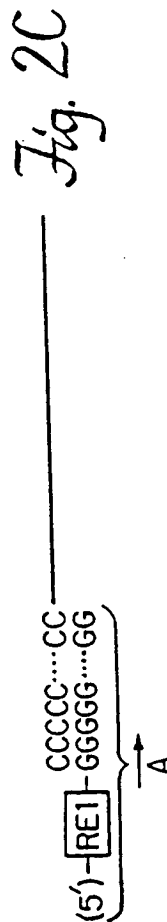Appl. No.: Unassigned   Atty Docket: STRATAG.7C2DV2CI

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              109            118            127
        >     AGT  CAG  TCC  TTC  CCA  AAT  GTC  TTC
              Ser  Gln  Ser  Phe  Pro  Asn  Val  Phe

              136            145            154            163            172            181
        CCC  CTC  GTC  TCC  TGC  GAG  AGC  CCC  CTG  TCT  GAT  AAG  AAT  CTG  GTG  GCC  ATG  GGC
        Pro  Leu  Val  Ser  Cys  Glu  Ser  Pro  Leu  Ser  Asp  Lys  Asn  Leu  Val  Ala  MET  Gly

              190            199            208            217            226            235
        TGC  CTA  GCC  CGG  TTC  GAC  CTG  CCC  AGC  ACC  ATT  TCC  TTC  ACC  TGG  AAC  TAC  CAG
        Cys  Leu  Ala  Arg  Phe  Asp  Leu  Pro  Ser  Thr  Ile  Ser  Phe  Thr  Trp  Asn  Tyr  Gln

              244            253            262            271            280            289
        AAC  AAC  ACT  GAA  GTC  ATC  GGT  CAG  AGA  ACC  TTC  CCA  AGG  ACA  GGG
        Asn  Asn  Thr  Glu  Val  Ile  Gly  Gln  Arg  Thr  Phe  Pro  Arg  Thr  Gly

              298            307            316            325            334            343
        GGC  AAG  TAC  CTA  ...  ACC  ...  ...  ATC  ...  ...  TTC  ...  ...  AGC  ...  ...  GGG
        Gly  Lys  Tyr  Leu       Thr            Ile            Phe            Ser            Gly

              352            361            370            379            388            397
        GGT  TCA  GAT  GAA  TAC  CTA  GTA  TGC  AAA  ATC  CAC  TAC  GGA  AAA  AAC  AGC  GAT  AGA  GAA
        Gly  Ser  Asp  Glu  Tyr  Leu  Val  Cys  Lys  Ile  His  Tyr  Gly  Lys  Asn  Ser  Asp  Arg  Glu

              406            415
        CTG  CAT  GTG  CCC  ATT  CCA     >  G
        Leu  His  Val  Pro  Ile  Pro
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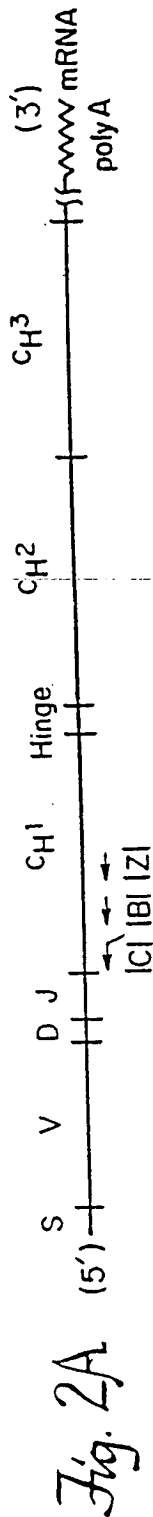
Fig. 4A

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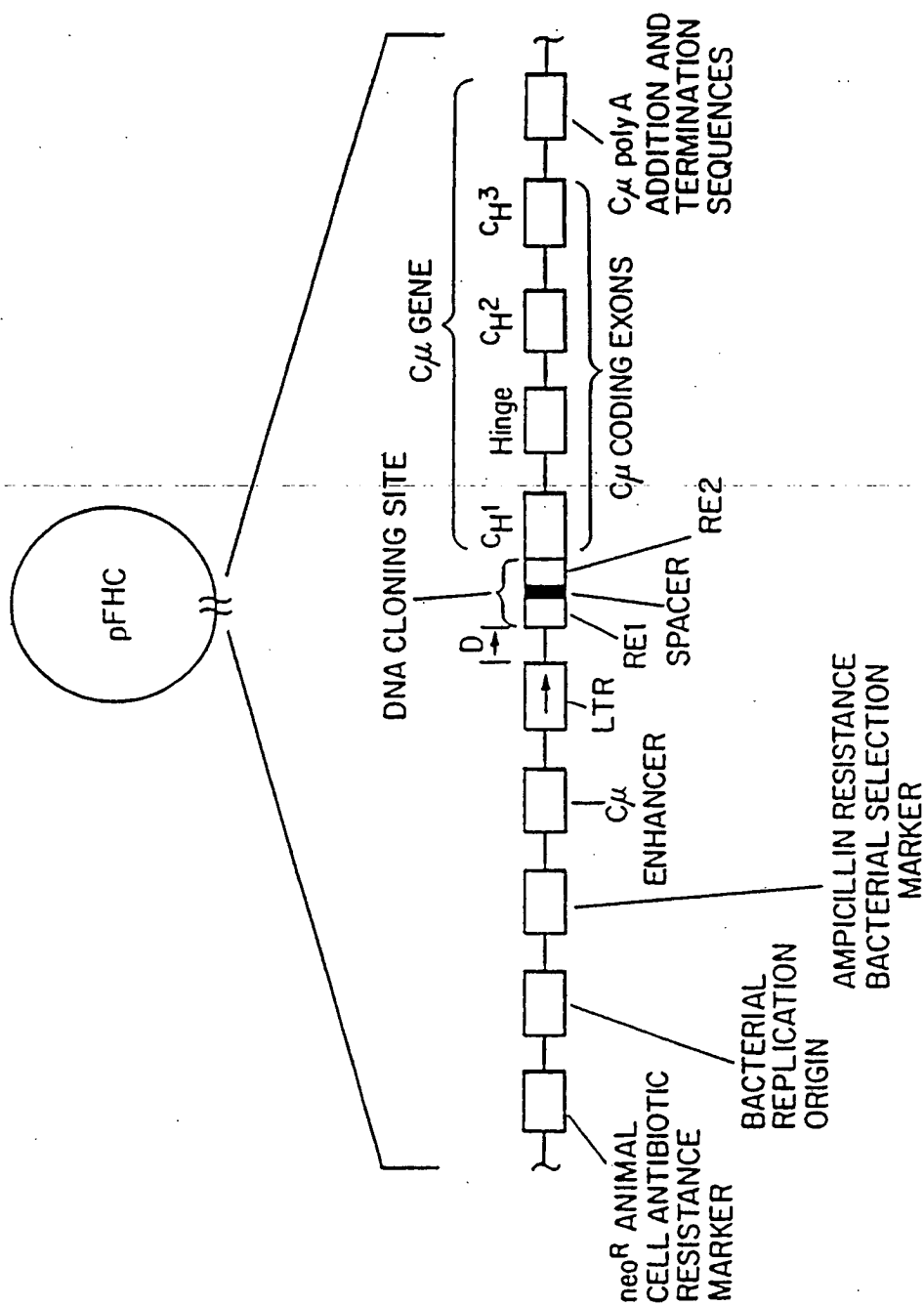Appl. No.: Unassigned   Atty Docket: STRATAG.7C2DV2CI

```
             109       118       127
      >  AGN CAN TCN TTN CCN AAN GTN TTN
                 Ser     Pro     Val

   136     145     154     163     172  181
CCN CTN GTN TCN TGN GAN AGN CCN CTN TCN AAN AAN CTN GTN GCN ATN GCN
Pro Leu Val Ser             Pro Leu Ser         Leu Val Ala     Gly

   190     199     208     217     226     235
TGN CTN GCN CGN GAN TTN CCN AGN ACN ATN TCN ACN TTN ACN AAN TAN CAN
    Leu Ala Arg         Pro     Thr Thr Ser Thr     Thr         CAN

   244     253     262     271     280     289
AAN AAN ACN GAN GTN CAN GGN AGN ACN TTN CCN ACN CTN AGN GGN
        Thr     Val         Gly     Thr     Pro Thr Leu Gly

   298     307     316     325     334     343
GGN AAN TAN CTN GCN TCN GTN ATN TTN CTN TCN CCN AAN AGN ATN CTN ACN
Gly         Leu Ala Ser Val         Leu Ser Pro         Leu     Thr

   352     361     370     379     388     397
GGN TCN GAN TAN GAN GTN TGN AAN ATN CAN TAN GGN GGN AAN AAN AGN GAN
Gly Ser             Val         Ser     Gly Gly Gly

   406     415
CTN CAN GTN CCN ATN CCN  > G
Leu     Val Pro     Pro
```

Fig. 4B